2 June 2014

Mr. David Bernhart Assistant Regional Administrator for Protected Resources National Marine Fisheries Service 263 13<sup>th</sup> Avenue, South St. Petersburg, FL 33701-5505

Dear Mr. Bernhart:

The Marine Mammal Commission (Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the proposed regulations published by the National Marine Fisheries Service (NMFS; 79 Fed. Reg. 21695) to amend the Bottlenose Dolphin Take Reduction Plan for the purpose of reducing bycatch from the species' northern North Carolina Estuarine Stock in Virginia pound nets. The Commission offers the following comments and recommendations.

## **BACKGROUND**

The Federal Register notice reviews available stranding and observer data indicating that at least 84 bottlenose dolphins have been killed or seriously injured in Virginia waters between 2002 and 2011 due to entanglement in pound net leaders. Those deaths are an unknown combination of animals from three different bottlenose dolphin stocks: the northern migratory stock, the southern migratory stock, and the northern North Carolina estuarine (NNCES) stock. Based on carcass discovery dates and what is known about seasonal migratory patterns of those stocks, up to 57 of the 84 deaths (an average of 5.7 animals per year) may have come from the NNCES stock, which is far smaller than the southern and northern stocks. Available data indicate, therefore, that the bycatch of NNCES dolphins in gillnets, pound nets, and crab traps likely exceeds the stock's potential biological removal (PBR) level of 7.9 dolphins per year, while the bycatch of dolphins from the southern and northern migratory stocks is likely far below their respective PBR levels and may be approaching the Zero Mortality Rate Goal (i.e., ten percent of PBR).

The pound nets used to catch various species of demersal fish include net leaders which extend several hundred meters in a straight line to lead fish into rectangular traps. Traditionally, pound net leaders were made of webbing that extended from the sea bottom to the surface. These entangle dolphins and sea turtles. In 2006, to reduce the catch of sea turtles, NMFS (under authority of the Endangered Species Act) and the Virginia Department of Marine Resources (VDMR) adopted comparable Federal and State rules that required, in part, the use of modified pound net leaders rising no more than one-third of the water column off the bottom. These were to be used during the times of year when sea turtles were most likely to be caught. Studies have shown that such modified leaders are as effective at catching fish as traditional leaders.

The Service convened a Bottlenose Dolphin Take Reduction Team in 2001 to consider how to reduce the bycatch of bottlenose dolphins in fisheries along the U.S. Atlantic Coast. At its meeting in September 2009, the Team reviewed information on bottlenose dolphin bycatch in

Mr. David Bernhart 2 June 2014 Page 2

Virginia pound nets and results of research testing the effect of modified leaders on catches of target fish. It was suggested that dolphins may become caught in leader nets while chasing prey and using net leaders to block the prey's escape. The team concluded that the modified net leaders then being used in some areas and at some times of the year to reduce turtle bycatch might be an effective mitigation measure allowing chased prey and dolphins to swim over the nets, thereby preventing dolphin entanglement. The team recommended that these modified net leaders be required year round, and in a larger area that encompassed the areas where dolphin bycatch was occurring. Specifically, it recommended that the modified leaders be required along all shorelines at the mouth of the Chesapeake Bay and along Virginia's Atlantic Coast.

Shortly after the team's 2009 meeting, NMFS advised the VDMR of the team's recommendation and its intention to develop such regulations. As an interim measure, VDMR amended the related State regulations to require the use of the modified net leaders for a slightly larger time and area than established in its initial rule, but not most of the additional time and area recommended by the team. The regulations now proposed by NMFS would require their use during all times and areas recommended by the team. Specifically, the proposed rules would (1) require use of modified pound net leaders on all offshore pound nets set in the mouth of the Chesapeake Bay and along the Atlantic coast from the Maryland/Virginia border to the Virginia/North Carolina border, (2) require their use year round, (3) add pound nets to the list of fisheries subject to the Bottlenose Dolphin Take Reduction Plan, (4) add geographic areas where pound nets would be subject to regulation under the Plan, and (5) add definitions for several pound net-related terms to the Plan. The latter include definitions for pound nets as currently defined in the sea turtle conservation regulations, and modified definitions for nearshore and offshore pound net leaders (i.e., leaders with any parts set in waters less than and more than 14 meters of depth, respectively). Conforming changes would also be made to the definitions of pound net leaders in the sea turtle conservation regulations under the Endangered Species Act.

## RECOMMENDATIONS AND RATIONALE

Stranding information cited in the *Federal Register* notice indicates that the bycatch of dolphins from the NNCES did decrease from an average of 5.7 dolphins per year from 2002 to 2011 to 5.0 per year from 2007 to 2011 when modified net leaders were required, despite the fact that applicable regulations only modestly expanded their use in time and area. Because the proposed regulations would require their use at all times and in all areas where NNCES dolphins are likely to be present, NMFS believes that the new requirements are likely to reduce bottlenose dolphin bycatch in net leaders.

Because the evidence cited in the notice indicating a reduction in bycatch rates after the new State measures went into effect include overlapping timeframes that do not match the timeframe for the new measures, support for the indicated reduction is weak and may not be valid. However, based on the cited information, we understand that the average annual bycatch potentially including NNCES dolphins would have been 6.4 dolphins per year during the five years before modified leader requirements first went into effect (i.e., 2002 to 2006) compared to 5.0 dolphins per year in the first five years after they went into effect (i.e. 2007 to 2011). While the Commission is unable to determine if this difference is statistically significant without knowing the underlying data, it believes the apparent reduction is encouraging and that it is reasonable to believe a further reduction could be achieved by expanding requirements for modified leaders to cover the entire time and area

Mr. David Bernhart 2 June 2014 Page 3

NNCES dolphins are likely to occur around Virginia pound nets as recommended by the take reduction team.

Therefore, the Commission fully supports NMFS's efforts to implement the recommendations of the Bottlenose Dolphin Take Reduction Team and the Marine Mammal Commission recommends that NMFS adopt the proposed regulations as written to (1) amend the Bottlenose Dolphin Take Reduction Plan prepared pursuant to the Marine Mammal Protection Act to limit the height of net leaders used in the Virginia pound net fishery in the lower Chesapeake Bay and along the Atlantic coast of Virginia and (2) make conforming changes to the related sea turtle conservation regulations under the Endangered Species Act. The Marine Mammal Commission also recommends that NMFS continue to monitor evidence of bycatch in pound net leaders to evaluate the effectiveness of the new rule once it is implemented.

The Commission appreciates the opportunity to review these proposed regulations. Please contact me if you have questions regarding these recommendations.

Sincerely,

Rebecca J. Lent, Ph.D. Executive Director